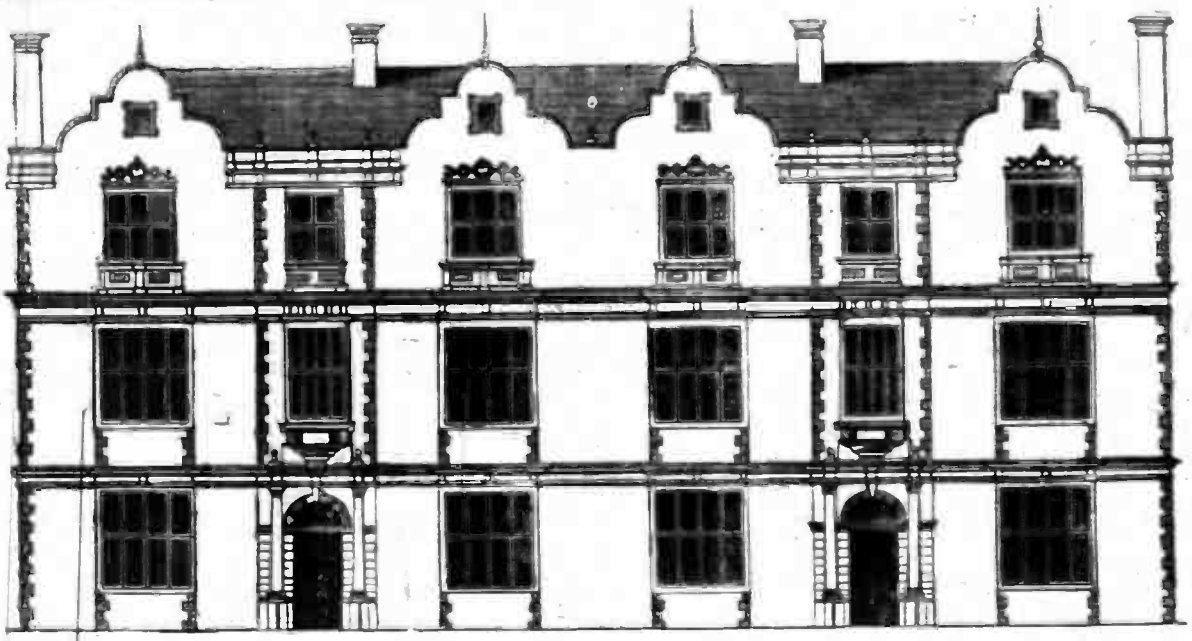
at the same time with a gentleman who had resided many years in the West Indies, and who seemed much disposed to have an iron house for himself. He said that he had no doubt that such a structure as that built for King Eyambo, would stand uninjured through the most violent shock of an earthquake, and would not give way even if one-third of the ground beneath the foundation was to sink from the opening of the earth; but he objected to the introduction of any wood, however small the quantity, on the ground that it would fill the house with vermin, which would there find both bed and board (the latter in more senses than one), and would constantly be in danger of fire. He informed us, that one reason why wooden houses, though so much safer in countries exposed to earthquakes, are so little used in the West Indies, is, that the rate of insurance upon them is so heavy as to render the expense unbearable. In some cases amounts to three per cent. per annum.

We are glad to learn that there is a prospect of the experiment of iron structures being tried on a great scale in the West Indies. The French government is now making inquiries and seeking estimates of the cost of rebuilding entirely with iron the unfortunate city of Point-à-Pitre, in the Island of Guadaloupe, thrown down by the late earthquake, and afterwards utterly consumed by fire. Some weeks ago we shewed that the only safety for the inhabitants of countries exposed to earthquakes, was in iron buildings, and we have no doubt, that if the French government should fulfil its intention, the restored city of Point-à-Pitre will stand for ages a monument of the triumph of art over the most awful convulsions of nature.

The following account of King Eyambo's palace we take from a contemporary:—

"The Iron Palace of an African King.—The palace of King Eyambo, of Old Calabar, built of plate and panels of iron, upon a wooden skeleton merely, by Mr. William Laycock, iron merchant, of Oldhall-street, was on Friday opened to public exhibition (for the benefit of the charities) in the open space near the Post-office. The structure consists of two stories and an attic. The first floor contains a centre hall, 40 feet by 14, and four rooms, 18 feet by 15; the whole ten feet high. The second floor is thrown into one grand state room, forming the royal audience chamber, 50 by 30, extending to 40 in the recesses, and lighted by thirteen windows. It is extremely airy and handsome, and is twelve feet in height. The attic is one apartment, extending over the entire building. The ceiling and walls of the hall of audience are richly decorated by Mr. Dodd, of Bold-street, and on the walls are placed a number of Jennings and Bettridge's splendid pictures, in papier maché, which will certainly astonish 'the natives.' More of these are to follow: one of the lower rooms is to be rendered absolutely gorgeous; and those who visit the palace once will be induced to go again, from the circumstance that embellishments of the first order will be gradually added to the attractions of the palace. When in Africa the building will be placed seven feet clear above the ground, on piles of hardwood, leaving space for store and bedrooms, the whole being designed rather as a state or business palace than as a domestic residence. It is surrounded by a balcony and verandah, and will be painted a light stone colour to resist the solar heat. King Eyambo, we understand, is an intelligent African, able to speak and write English in very fair style."—*Liverpool Times.*



STAPLES INN CHAMBERS.

The site where this building is erected is the property of the Honourable Society of Staples Inn, and consists of a suite of chambers, to be occupied by the Masters in Chancery; it was formerly a great wool mart, from whence it derives its name, Staples Inn, and we believe one of the oldest inns in London. The design (Elizabethan) is from the hands of those highly talented and respected gentlemen, Messrs. Wigg and Pownall, architects, Bedford-row; Mr. Samuel Grimsdell, of Sun-street, Bishopsgate-street, is the contractor. The quoins, oriel windows, doors, cornices, &c. &c. are of Portland stone, wrought by Mr. Samuel Hemming, mason, of Regent-street, Westminster, to whom great praise is due for the masterly execution of his work; the facing is of Suffolk bricks, with a neat bastard tuck joint; the works have been conducted by Mr. R. Smith, to whom also great credit is due for the manner in which they have been carried out.

ACCOUNT OF THE BUOYANT SEA BARRIER, INTENDED FOR THE FORMATION OF SHELTERED FLOATING HARBOURS OF SAFETY, &c., INVENTED BY CAPTAIN A. W. SLEIGH, K.T.S., LATE R.N.

As every thing connected with the protection of our naval and maritime interests is of great importance to this country, it is with pleasure we refer to a new invention under the above title, together with an illustrative description published on the same, and more particularly as one is in course of construction for a small harbour of refuge near Folkstone, at the Ponton Dock-yard, Nine Elms, Vauxhall. Its object is to form harbours of refuge, not only to shelter ships from the effects of the waves of the sea, but from the fury of the tempest, and is the subject of a patent by the inventor.

The explanation which Captain Sleigh gave at the last meeting of the British Association at Manchester, and a few days since at the Royal Institution in Albemarle-street, are not only highly interesting, but exceedingly comprehensive; whilst, at the same time, he treats of breakwaters in general with a confidence and correctness that could only arise from considerable experience in these matters. It appears not only original in the manner proposed to realize the desired objects for which it is intended, but the shape of the structure or fabric, the application of those favourable results derived from the suggestions of nature, and the adaptation of each part in connection with the other, are perfectly novel. Should they succeed in practice, of which there is every probability, from the success of various experimental trials, we hesitate not to predict that it will turn out an invention of the very greatest utility to the nation.

The author assumes, in the first place, that the waves of the sea are perfectly superficial, that the wind is refracted from off the superior and windward surface of the billow, and that, as the agitation of the sea is alone attributable to the rapid current of air passing over it, there cannot be any material influence from that cause below the lower curve or trough of the sea. Captain Sleigh then adverts to the impracticability of constructing solid breakwaters of masonry where they would be most required—to the frequent evil consequences resulting from their adoption, by collection of sands in their vicinity—to the enormous expense, and the length of time incurred in their construction before any benefit that can be derived from them, and to the not only useless but injurious quantity of material consumed by these rocks under water, where all is comparative repose. He then states, that many years back, from various circumstances occasioned during his professional services, and from necessity arising on exposed coasts, where there were no harbours that could be entered, he conceived the idea of the possibility of constructing a floating sea barrier, on the principles above stated, which appears to be perfectly novel in its construction. This appears to embrace the power of two elements in order to antagonize or frustrate the effects of each, as while arresting the waves on their onward whirl, by presenting to them a yielding but solid inclined plane of modified resistance, it turns upwards with the same ease the tempest from off the face of the waters, and thus not only releases the sea from the chafing effect of the storm, but also places in a state of calm or repose, a vast extent of the harbour under the lee and within the limits of the Buoyant Sheltering Barrier.

The invention consists of two parts: a hollow caisson, built either of timber or plate iron, of an oblong wedge-like form, its proportions being about 150 feet long, 20 feet wide, and 7 feet deep, at the highest or rounded

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